

3D Printing Solutions

LIMITLESS CUSTOMIZATION TO ENHANCE 0&P PATIENTS' COMFORT



Lubrizol is a leading provider of innovative engineered polymer solutions that include a diverse range of thermoplastic polyurethane (TPU) amongst other in-house materials suitable for 3D printing of soft and flexible applications. This specialized portfolio is available in either powder TPU (multi jet fusion* or selective laser sintering) or pellet form (fused granulate fabrication) for filament (FFF) extrusion to meet specific market requirements for printed parts, such as high strength, high abrasion resistance with outstanding surface and haptic properties. Additionally, a bio-based** solution is available for FFF. Our 3DP solutions can be combined with other rigid materials and have exceptional dimensional stability.

Our 3DP technology helps improve patient comfort and reduce costs, while also offering unlimited design possibilities and faster industry cycle times. We understand that each patient's requirements are unique, which is why our 3DP solutions enable the production of orthotic and prosthetic (O&P) parts according to personalized parameters, such as surface finish and appearance. Most importantly, our 3DP solutions provide the standard high-performance attributes of TPU, such as flexibility, durability combined with high mechanical properties, enabling the highest skin contact standards.



Image Courtesy of Quorum Prosthetics



*Proprietary HP® technology **Bio-based content as certified in accordance with ASTM D6866.

Helmets Sockets Flexible Inners **Neck Support Compression Pads Prosthetic Covers Shoulder Orthotics Torso Braces Finger and Partial Wrist Braces Hand Prosthetics** Hand Orthotics Ankle Gauntlets SMOs Club Feet Braces Insoles **Prosthetic Feet**

FOR A WIDE RANGE OF ORTHOTICS AND PROSTHETICS DEVICES:

At Lubrizol, we offer tailored solutions for O&P that cover the entire process from ideation and design to post production.



